

Patent Claims

1. A method for interchanging data between an external device (ISP) and applications installed on 5 network elements (PC) of a packet-switching network using at least one tunnel connection,

- in which each network element (PC) is connected to a network node device (ROU),
- in which the network node device (ROU) is involved 10 in the tunnel connection, and
- in which the network-end terminal point of the tunneled connection is allocated a global address uniquely,

15 with the network node device (ROU) forming the network-end terminal point of the tunnel connection when there are a plurality of network elements (PC) with joint use of the tunnel connection,

characterized

20 in that if one of the network elements (PC) requires a global address for executing an application it sets up a tunnel connection and forms the latter's network-end terminal point, this tunnel connection being used only by this network element (PC), and all tunneled data being routed through the network node device (ROU).

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2. The method as claimed in claim 1,

characterized

30 in that the network node device (ROU) may alternately or simultaneously be a terminal point or a data-routing entity of a tunnel connection and/or of a plurality of tunnel connections.

35 3. The method as claimed in one of the preceding claims,

characterized

in that the tunnel connection is a connection which operates on the basis of the PPTP tunneling protocol and

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which transmits the data in a tunneled connection without influence.

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4. The method as claimed in one of the preceding claims,
characterized
in that the network elements (PC) are PCs and the
5 external device (ISP) is an Internet service provider
connected by means of a DSL modem (MODEM).

5. The method as claimed in one of the preceding claims,
10 characterized
in that the network elements (PC) have associated local
addresses which are unique only in the packet-switching
network (LAN).

15 6. The method as claimed in one of the preceding claims,
characterized
in that the network node device (ROU) is a router which
has an entity for setting up and operating a PPTP
20 tunnel connection.

7. A network node device which is involved in the
interchange of data using at least one tunnel
connection between an external device (ISP) and
25 applications installed on network elements (PC) of a
packet-switching network,
- in which each network element (PC) is connected to
a network node device (ROU), and
- in which the network-end terminal point of the
30 tunneled connection has a uniquely allocated
global address,

with the network node device (ROU) forming the network-
end terminal point of the tunnel connection when there
are a plurality of network elements (PC) with joint use
35 of the tunnel connection,
characterized

in that if one of the network elements (PC) requires a

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global address for executing an application it can set up a tunnel connection and then forms the latter's network-end terminal point, this tunnel connection being able to be used only by this network element

5 (PC),

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and all data being routed through the network node device (ROU).